

CLAIMS:

1. A mobile communication terminal for use in a wireless communication network, the mobile communication terminal
5 comprising:

a processor unit controlling the operation of the mobile communication terminal;

10 a microphone;

a sound processing module for processing sounds captured by the microphone;

15 said processor unit being configured to operate the terminal for push-to-talk communication with at least one other mobile communication terminal via the communication network;

20 said processor unit operating said terminal during said push-to-talk communication in a latency state or in an active state in which sound captured by the microphone is processed by the sound processing module and sent to the at least one other mobile
25 communication terminal;

said processor unit being configured to change from the latency state to the active state in dependence of the sound captured by the microphone.

30

2. A mobile communication terminal according to claim 1, wherein the processor unit is configured to switch to the active state when the sound level detected by the microphone exceeds a first given threshold.

35

3. A mobile communication terminal according to claim 1, wherein the processor unit is configured to switch to the

latency state when the sound level detected by the microphone drops below a second given threshold.

4. A mobile communication terminal according to claim 1,
5 wherein the terminal comprises a speech command recognition module.

5. A mobile communication terminal according to claim 4,
10 wherein the processor unit is configured to switch to the active state when a given speech command is recognized by the speech command recognition module.

6. A mobile communication terminal according to claim 4,
15 wherein the processor unit is configured to switch to the latency state when a given speech command is recognized by the speech command recognition module.

7. A mobile communication terminal according to claim 1,
20 wherein the terminal comprises a voice recognition module for recognizing a given voice and the processor unit is configured to switch to the active state when a given voice is recognized by the voice recognition module.

8. A mobile communication terminal according to claim 1,
25 wherein the processor unit is configured to switch to the latency state when the time of no capture of the microphone exceeds a third given threshold.

9. A mobile communication terminal according to claim 1,
30 further comprising filtering means for preventing the microphone from capturing other sound sources different from the human voice.

10. A mobile communication terminal according to claim 1,
35 wherein the terminal comprises an incoming speech control module.

11. A mobile communication terminal according to claim 10,
wherein the processor unit is configured to switch to an
incoming speech state in which the incoming speech
control module receives incoming speech from the one
5 other mobile communication terminal.

12. A mobile communication terminal according to claim
11, wherein the processor unit is configured to switch to
the incoming speech state after an accepted speech
10 command is recognized by the speech command recognition
module.

13. A mobile communication terminal according to claim
10, wherein the processor unit is configured to switch to
15 the latency state when the incoming speech has been
received by the incoming speech control module.

14. A mobile communication terminal according to claim 1,
wherein the active state comprises a waiting sub-state
20 until the communication network accepts a speech request
from the terminal, and a sending sub-state when the
communication network accepts the speech request in which
the terminal sends the sound captured by the microphone
and processed by the sound processing module to the at
25 least one other mobile communication terminal.

15. A mobile communication terminal according to claim 1,
wherein the active state comprises a queuing sub-state
when the terminal is in an incoming speech state and
30 sends a speech request to the communication network.

16. A method for a push-to-talk communication between a
mobile communication terminal and at least one other
mobile communication terminal via a communication
35 network, comprising the steps of:

(A) enabling a latency state of the terminal;

(B) capturing a sound by means of a microphone of the terminal;

5 (C) switching the terminal to an active state, in dependence of the sound captured by the microphone.

17. A method according to claim 16, wherein the active state comprises the sub-steps of:

10 (AS.1) sending an speech request to the communication network;

(AS.2) waiting a response from the communication network;

15 (AS.3) receiving a response from the communication network;

20 (AS.4) sending the sound captured by the microphone to the other mobile communication terminal, if the response from the communication network is positive.

25 18. A method according to claim 17, wherein the terminal switches to the latency state if the response in the sub-step (AS.3) is negative.

30 19. A method according to claim 17, wherein the active state comprises a sub-step (AS.5), between the sub-steps (AS.3) and (AS.4), comprising processing the sound captured by the microphone by means of a sound processing module.

20. A method according to claim 17, wherein step (C) comprises the sub-steps of:

35 (C.1) comparing the sound level detected by the microphone with a first given threshold;

(C.2) switching to the active state, if the sound level detected by the microphone exceeds the first given threshold.

- 5 21. A method according to claim 17, wherein step (C) comprises the sub-steps of:

(C.3) comparing a detected speech command with at least one speech command stored in the terminal;

10

(C.4) switching to the active state, if the given speech command and one speech command stored in the terminal are substantially identical.

- 15 22. A method according to claim 17, wherein step (C) comprises the sub-steps of:

(C.5) comparing a detected voice with at least one voice stored in the terminal;

20

(C.6) switching to the active state, if the detected voice and one voice stored in the terminal are identical.

- 25 23. A method according to claim 17, wherein the active state comprises after sub-step (AS.4) the sub-steps of:

(AS.6) comparing a detected speech command with at least one speech command stored in the terminal;

30

(AS.7) switching to the latency state, if the detected speech command and one speech command stored in the terminal are identical.

- 35 24. A method according to claim 17, wherein the active state comprises after sub-step (AS.4) the sub-steps of:

(AS.8) comparing a time of no capture of the microphone with a third given threshold;

5 (AS.9) switching the terminal to the latency state if the time of no capture of the microphone exceeds the third given threshold.

25. A method for a push-to-talk communication between a mobile communication terminal and at least one other
10 mobile communication terminal via a communication network, comprising the steps of:

(D) enabling a latency state of the terminal;

15 (E) alerting of an incoming speech;

(F) capturing a sound by means of a microphone of the terminal;

20 (G) switching the terminal to an incoming speech state, in dependence of the sound captured by the microphone.

26. A method according to claim 25, wherein step (F)
25 comprises the sub-steps of:

(G.1) comparing a detected speech command with an accepting speech command stored in the terminal;

30 (G.2) switching to the incoming speech state, if the detected speech command and the accepting speech command stored in the terminal are identical.

27. A method according to claim 25, wherein the incoming
35 speech state comprises the sub-steps of:

(IS.1) receiving an incoming speech from the one other mobile communication terminal;

(IS.2) switching to the latency state of the terminal.